ISSUE 161 DECEMBER 2023

KNOTTING MATTERS

The Magazine of the International Guild of Knot Tyers

INTERNATIONAL GUILD OF KNOT TYERS

The International Guild of Knot Tyers (IGKT) is a registered UK Charity No. 802153

PRESIDENT
Mikko Snellman
e-mail: **president@igkt.net**

HON SEC
David Bodger
e-mail: **secretary@igkt.net**

IGKT POSTAL ADDRESS
IGKT
Oaken Cleave, Cobbaton,
Umberleigh, EX37 9SG, UK

MEMBERSHIP SECRETARY
Caroline Sandrey
15 Spey Close, Thornbury,
Bristol, BS35 2NR, UK
e-mail: **membership@igkt.net**

www.igkt.net
Items intended for the website should be submitted to Colin Byfleet at
cr@byfleet.org

ISSN 0959-2881
Printed by Gipping Press Limited.
Tel: 01449 721599

Subscription Rates	
	/year
Juniors (under 18)	**£5**
Adults	**£26**
Family	**£30**
Group (min 10)	**by arrangement**

KNOTTING MATTERS

THE MAGAZINE OF THE INTERNATIONAL GUILD OF KNOT TYERS

EDITORIAL BOARD
Gregg Blain
Rich Cifelli
Steve Drew
Barbara Frankel

Postal Address
Knotting Matters
Silverwood House
Old Avenue, Weybridge,
KT13 0QA, UK

We welcome member's letters, articles, photographs, sketches and cartoons for publication. E-mail **knottingmatters@igkt.net.**

Your pictures should be of good quality, please send as attachments. All submissions must include the author's name and e-mail or postal address.

Publicise your events in *Knotting Matters*, note that March, June, September and December are the months of publication. Although the deadline for the next issue is given at the foot of the Contents page, please note that the editors begin putting it together at least three weeks earlier.

Except as otherwise indicated, copyright in *Knotting Matters* is reserved to the International Guild of Knot Tyers, IGKT 2023. Copyright of articles published in *Knotting Matters* is reserved to the authors and permission to reprint should be sought from the author and the editor. All sources of quotations printed in *Knotting Matters* are hereby acknowledged.

KNOTTING MATTERS

Issue 161 December 2023

3 Editorial

3 Corrections and Apologies

4 Current Guild Structure

7 Letters to the Editors

16 Twist Drill Method

19 A Knotted Writing System

26 World Knot Tying Day

29 Ropemaker

31 Nettle, Heather & Straw

37 (K)not Just For Accounting

44 'Miracle' Knot Baby Born

45 Obituaries

46 Rawhide Gathering 2023

51 News from the Branches

52 2024 IGKT AGM

56 Branch Details

PLEASE NOTE: LETTERS AND ARTICLES FOR THE MARCH 2024 KNOTTING MATTERS MUST BE RECEIVED BY 1ST FEBRUARY 2024

FRONT COVER: FRANK BROWN CREATES A PAIR OF HIKING BOOT LACES P16

Editorial

Every time I start out on a new edition of KM, my feelings range between the excitement of Christmas morning and the hangover of New Year's Day. I look forward to the stories and interests of fellow members of IGKT, but as deadlines loom and content looks thin or a favorite photo or last minute article can not fit, I can be filled with the malaise of New Year's Day.

Speaking on behalf of the Guild Management, Trustees, and current editors of KM, we want to wish all of you a safe, happy, and healthy holidays and a wonderful new year. I hope each issue brings you new information and introduces you to new friends. When an author invites you to reach out, I hope you will. Let's continue to grow this wonderful community.

I am always amazed how each issue seems to self-organize around a topic. This issue, we have two interesting articles about knot writing. As noted in the second article p37, KM has seen writings on this topic going back to the earliest issues. There are also several, independent, calls for more interaction, feedback, and participation. Please, get stuck in to the conversation.

The choice of cover for December 2023 was difficult for me. I am drawn to the vivid colours and work of Jerome George (p14), but, I also love the craftsmanship and heritage of Nyk Feller's rawhide creations (back cover and p46). Finally, I was won over by the seemingly simple hiking boot laces made by Frank Brown (p16), made with his twist drill method. Shoe laces, are for many of us, the source of one of the first knots we are taught to tie. I also think it gets to appreciating the simple things in life. Who among us would not be ecstatic if a pair of Frank's shoelaces was under their Christmas tree?

I hope you will pass on your enjoyment of IGKT and Knotting Matters by giving out gift subscriptions this year. I look forward to learning more about the knotting matters that pique your interest. Lastly, please join me and the other editors in welcoming aboard Rich Cifelli who has kindly offered his editorial assistance to Knotting Matters.

- Happy Holidays! Steve Drew

Corrections and Apologies

In KM160, we reported that the AGM will be at the National Historic Dockyard. The location has changed, and the 2024 AGM will now be held at the National Museum of the Royal Navy, Hartlepool May 9-11. See p52 for details.
https://www/igkt.net/igkt-forum/general/

Current Structure of the Guild

The IGKT has recently had queries from various sources which have made us realise that it might help you to know more about the Guild, how it is run and how it operates. We hope that this article will help to explain these issues.

The IGKT

The Guild is set up as a UK Charity which gives us a number of advantages, especially with regard to taxation. We therefore must operate within UK Charity Law and are answerable to the UK Charity Commission. They have approved our Constitution which can be found on their website (https://register-of-charities.charitycommission.gov.uk/). Search for our charity number 802153.

The President

Currently Mikko Snellman from Finland

The President is the figurehead who represents all the Guild stands for. He/she is elected for a 3-year term by the AGM on the recommendation of the outgoing President.

The Council of Trustees, or Council

The Trustees are responsible for maintaining the ethos of the Guild and its aims, including information and education. They are also responsible for ensuring that the Guild adheres to the rules of the UK Charity Commission and as such must be UK residents. There are 7 Trustees elected by the AGM and who serve a 5-year term which is renewable. Three of them are the officers, nominated by the Trustees and confirmed by the AGM. They too serve for a 5-year term which is renewable just once. They are currently:

Chairman: Sheila Pearson

Treasurer: Colin Byfleet

Secretary: David Bodger

Trustees: Peter Hennessey, Lynne Hudson, Tim Martin, Sue Pennison

The Council meets several times a year by Zoom and in person at the AGM to discuss issues facing the Guild and raised by the members, topical matters and ways of developing the Guild to promote its aims. These may involve considerable research and discussion. Where appropriate the decisions will be

passed on to the Executive Committee for action and implementation.

The Executive Committee

This is the Guild's "working party" following through the ideas passed to them by the Council. They also act as a conduit for issues from the Branches. There are 9 members appointed by the Council. They currently represent six different countries. This membership includes a representative from the Trustees to link the two committees. Like the Council, they have a Chairman and Secretary appointed from within their membership on their recommendation and approved by the Council. Members and Officers are appointed for a 5-year term which is renewable. The current members are:

Chairman: Darren Samphier

Secretary: Jim Wolf

Council Appointee: Lynne Hudson

Other members: Ed Crumpton, Adam Masters, Graham MacLachlan, Ralph Streller, John Trevvett, Geert Willeart

Branches

Local Branches and National Organisations have been set up around the world. Any group of members are welcome to set up their own Branch: there is no set format. However, to be recognised by the Guild, they should primarily be of Guild members, and have a proper constituted format, aims and objectives. Many of them have their own membership and a subscription to cover their necessary costs such as a Zoom subscription. Thus Guild members will pay both subs and non-Guild members just the Branch or National Organisation (eg IGKT France) sub. There is a list of Branches in Knotting Matters.

Knotting Matters

This is the quarterly magazine sent to members and currently produced by a group of four editors. It contains articles submitted by members, reports on events held and Branch activities, as well as other important Guild information. It is your magazine, so please submit articles and news to the editors via knottingmatters@igkt.net.

The Website

The Guild's new website is still in its trial stage so it will change a little from time to time. It is there to convey up to date information on events, activities and Guild issues plus provide information about the Guild, contact points, etc.

There is a public section, and the members' section which is accessible by registration. At present we have no Web Master so please contact us if you're interested in this important role. In the meantime, please send any comments or information for posting to treasurer@igkt.net.

The Guild Forum and Facebook

For some time the Guild has had a Forum for the exchange of comments and queries about knotting. The new website was incompatible with the software used so we had to close it down. It is now archived and available for information via the website. There is also a new Forum up and running, also accessible via the website, but this is now restricted to members only. Non-members are invited to "converse" via the Guild Facebook site (Official International Guild of Knot Tyers (IGKT). This is also useful for disseminating things and events about knotting.

Membership

Membership is open to people who are interested in all things concerning every aspect of knotting and rope. The Guild's Membership Secretary handles all membership issues and problems. Please contact her via membership@igkt.net.

Publications

The Guild produces a number of its own publications. These are produced and updated by the Publications Team. If you want to submit something for possible publication, please contact the Secretary in the first instance via maurice.mcpartlan@btinternet.com.

Sales

The Guild holds a stock of Guild publications and a number of different Guild badges. The stock is listed on the website. Please contact the Supplies Secretary via the website or via supplies@igkt.net if you want any items. https://igkt.net/goods-4-sale

Future Plans

In order to keep members as up to date as possible we are hoping to begin a monthly email to all members who wish to receive it. This will carry news and information about forthcoming events. It will supplement KM, not replace it, but fill in between issues.

Letters to the Editors

Dear Editors,

Thanks so much for the lovely welcome pack I received from the Membership Secretary. Very good reading material in KM160, and I was particularly delighted with the Jubilee Sailing Trust article, as I had the great luck and pleasure to sail with them twice a long time ago. It's wonderful to read that the excellent principles, skill and camaraderie are just the same.

Best wishes
Amanda

Dear Editors,

On the Isle of Portland (UK) there is the Portland Museum & Shipwreck Centre. On a recent visit I saw this item of rope work, the overall length is probably about 10ft (3 metres) long, sorry to be a bit vague, if I had my IGKT scale card with me at the time it might have helped give me a more accurate estimate of length, and the size of the rope. https://portlandmuseum.co.uk/

Yours, Mark Richmond - *ed - That is quite the 'bell rope'!*

Dear Editors,

I am recently returned from the Bay Area Maker Faire 2023 (BMAF2023) (https://makezine.com/article/maker-news/maker-faire/liveblog-maker-faire-bay-area/) [my first plane trip since COVID began], this mid-October 2023. I went to see what the revival was like and to help my friends at The Lace Museum (TLM) (https://thelacemuseum.org/) run their booth. BAMF2023 (https://makerfaire.com/bay-area/) was running over 2 weekends for the first time: Friday, Saturday, and Sunday for 2 consecutive weeks.

I have exhibited many times at both BAMF and Vancouver's Mini Maker Faire. It is very stressful for an introvert like myself to lead an exhibit, but even though you might initially feel like a low tech anachronism in the context of a Maker Faire, attendees and fellow exhibitors alike very much appreciate the content.

I firmly believe that if the IGKT is serious about recruiting, younger members in particular, they should make a deliberate effort to exhibit at Maker Faires and similar events and to create both guides and resources for members doing so.

- Short of a scout jamboree, Maker Faires are an optimal venue to to attract new blood, especially young people. Attendants tend to be people inclined towards handcrafts and are not afraid of complexity.
- Non-profit demo'ing exhibitors are often free to participate
- There are many Maker Faires around the world (https://makerfaire.com/upcoming-faires/) and if you are near one you should consider exhibiting.
- Many young people were exposed to braiding and TLM, some of which showed interest in learning more.
- Many teachers were exposed to braiding and TLM, with clear intentions of teaching braiding to their students.

- Carol Wang
http://www.chineseknotting.org/
The Chinese Knotting Home Page
http://www.knottynotions.com/
A decorative knotting blog
https://www.instagram.com/igknotme/
@igknotme

The Lace Museum
since 1981

Dear Cerberus+1,

Now that there are four heads instead of three, I have had to add the plus one.

The Guild has been going well for over forty years and for most of that time the subgroups have been called Branches, with the exception of the New Zealand Chapter.

If you must head the branch details at the end of each KM with the label Chapters then please revert to an old system and make it 'Chapter the Last - Branch details'.

Otherwise stick to the time honoured heading of Branches. Chapters smacks of US trade unionism with associated hints of corruption and malfeasance which is the last thing that should be connected with the Guild.

Maybe I read too much cheap crime fiction, but a recent non-fiction read on Organised Crime in Chicago showed how crime had developed up until 1929 when the book came out. It highlighted the control of some unions by organised crime during the early career of Al Capone and other gangsters.

'The Gangs of New York' (the original book - not the film) also shows how Unions were used to fix votes and control elections. More recent tales of the Teamsters union only back up my suggestion.

While it is to be hoped that I am unjustly maligning modern trade unions it does not remove the desire that Branches of the IGKT should still be called BRANCHES.

Get it right or we might send the boys around.

Best wishes,
Richard Hopkins.

Dear Editors,

While I was enjoying KM160, I found myself bemused by the Editorial on pg 4. The Editorial has Editor's comments? Thanks for the chuckle. I have a hard time picking my favorite article from this issue. Keep up the good work.

Frayed, not whipped,
Robert Earl (Vassar, New York)

Ed - Well spotted. As there are multiple contributing editors, maybe it should be 'Dear Cerberus,'?

Editor's note (BF):

Hook line and sinker! We changed the Branch News to Chapter News to make a point about inconsistent information on the IGKT website (which will be expanded on shortly). We knew it would raise some heckles and we were right!

I bring your attention to the Constitutional Rules of the IGKT that states: "Branches 41. Members are encouraged to set up branches of the Guild in their own countries or areas and such branches must submit a copy of their rules to the Council for ratification."

The term 'branches' therefore has a very specific definition in the IGKT. The term ''Chapter" is used in many countries to refer to informal or formal sub-groups of an organisation, club, guild or society – for example in the USA and Australia – where the term does not conjure the meanings so abhorrent to some of our UK readers; it's just a term to mean sub-group. The New Zealand Chapter is a case in point.

What I have noticed on the IGKT website are therefore some inconsistencies. There are a few branches named (and presumably ratified): East Anglia, Surrey, West Country Knotters, and Yorkshire. International branches are New Zealand Chapter (!!) (non active?), Mid-Atlantic Region of North America, Southern Ontario, Germany, France and East USA. Other groups are listed under a branches banner elsewhere that include Australia, Midlands, Solent etc.

Richard is a member of the West Country Knotters Branch, so I can see why branch news is important!

So my question is which are the ratified branches, and why are non-ratifed groups called branches?

I'd rather the boys weren't sent around (to Tasmania), but if they are, can they please teach me some knots?

Dear Editors,

New knots - some thoughts. Lindsey Philpott raised some interesting points in KM60 p43, and reawakened my interest on the subject of a creating a catalogue of knots. Considering that the IGKT was founded following the erroneous reporting of a new knot, it is surprising that there has been little discussion in KM on the subject (according to my less than perfect memory).

I was very happy to see Lindsey's first question, as it paralleled my preferred definition of a "new knot", i.e. one that has not been published. Unfortunately, I am not sure how the next two questions relate to whether a claimed new knot is actually new. Structure, usefulness, strength and ease of tying are definitely of interest in the study of all knots I would have thought, new or not. Similarly, rearranging a knot by manipulation could be useful information in identification but again how does this relate to newness? I would very much appreciate it if Lindsey enlarged on these and enlighten this old dodderer.

The suggestion that there be a formal body formed to examine new knots has my full support for what it is worth. Testing of performance etc., is obviously desirable, and will need some form of standardisation would it not? Who would be responsible for such testing? I think the main need is for the creation of a catalogue of all published knots. Easy to say, not easy to do! The formal body would need a catalogue containing all published knots, identified and accessible in order to determine whether the offering actually is "new", no?

After looking at the way various collections of data are catalogued, I have determined that two systems are required. One is to arrange the knots according to their type, as is the usual way used in knotting books, but to use numbers to identify the type and location within the catalogue. The reason I suggest numbers be used is that they are practically universal and so more accessible. The famous Linnaeus system of systematically organising plants, animals and fungi could easily be adapted to the existing grouping of knots, e.g. Bends, Loops, Nooses, Hitches etc. I believe it was Bob Chisnall who introduced me to this idea many years ago. Basically any knot would be classified as a genus and variations as specie. As an example there are two specie of the Reef / Square knot and four specie of Sheet Bends and Bowlines. I do not know if all of these have been published, but I can demonstrate their existence. Each Family, Genus, Specie, Sub-specie / variety would have an identifying number.

The other system would be to assign numbers to certain characteristics of each knot. These include Crossing Number as in Geoff Budworth's "Knots and Crime", Concentrated and Distributed Nip as in Charles Warner's "A Fresh Approach to Knotting and Ropework". There are some basic structures such

as right and left handed Half Hitches, Thumb/Overhand knots and Turns that are used widely in making more complicated knots and could be assigned identification numbers. Roger Miles exposed me to the concept of symmetry in his book “Symmetrical Bends” which I believe could be a property of other knot forms. A 1 or 0 could be used to signify symmetry or not in a knot. I have developed a coding system that identifies the manner in which working ends exit a knot, i.e. more numbers. Thus I believe it is possible to generate a series of numbers specifically generated by the knot under study. In my dream of creating a knot catalogue I have also envisaged including photos of the obverse and reverse of each knot entered into the system as well as a line drawing / plan.

I believe that it would be ideal for each published knot to have an identifying string of numbers similar to other cataloguing systems. To me it would be preferable that such a string should supply information as to the structure and type of knot so identified. The Dewey system as used in many, many libraries provides information of the location of a particular book as well as an indication of its subject matter. The ISBN number of a book also provides information including language, publisher, edition and price. The CAS number provided for known chemicals, over 200 million at the time of writing, but only identifies the chemical which can in many cases be known by several names. We have only a few thousand knots to catalogue at the moment but theoretically there are an infinite number of possibilities. I believe it is possible to develop a system of collecting, recording and assigning a numerical cipher to every published knot using the communication and recording systems available to us, but it needs skilful organisation and computer savvy, and I know I do not have the required skills and knowledge. Any volunteers???

In returning to the original question of “is it a new knot?”, I consider Lindsey’s suggested approach is essentially practical. The lone knotter may be able to generate a method of answering the question but I think a group effort has a far better chance. Perhaps the suggested steering group could conduct a trial run on one type of knot such as terminals. There would only be a few I assume but enough to test any developed system. I await developments, if any.

- Frank Brown

Editor’s note - Frank resurrects a very interesting topic. I have taken the liberty to posit his proposal in the IGKT Forum. Please join the conversation.

https://igkt.net/igkt-forum/general/new-knot-investigations/creating-a-catalogue-of-knots or https://bit.ly/IGKTForum

Dear Editors,

When I was 10 years old I sailed from Halifax, Nova Scotia to Riga, Latvia in the Soviet Union aboard an old wooden 90' Barkentine under sail. I was a working member of the crew with duties as Cabin Boy to the captain. For example, before he took the noon sight I would go to the captain's cabin and retrieve the sextant and bring it to him on deck. I would return to his cabin and retrieve the chronometer which was encased in a large wooden box and bring it on deck and sit near the captain. I would call out the time as it approached noon and he would call out "MARK" and I would write down the exact time and he would then call out the angle which I recorded on a note pad. There would always be three sights in very close succession. I would then return the chronometer to the locker, return to the captain and retrieve the sextant and place it in its locker in the captain's quarters. I would then get out a worksheet and enter the times and angles in the appropriate boxes and get the tables out of the locker and the chart out of the chart drawer along with the plotting tools. When the captain was ready, he would reduce the sight using the tables and worksheet and plot our estimated position. Being a good captain, he instructed me in every step of the process until I was able to reduce and plot our position myself. He always supervised and checked my work. By the end of the voyage, I was very proficient at that duty.

I had several other duties such as bringing the peg board down from the helm and plotting our dead reckoning track on the chart. The peg board was a compass rose with radial lines of holes for pegs. Every time the helmsman altered course he placed a peg in the appropriate radial line. The pegs were colored for speed based on a crew member throwing the chip every course change or sail change. The distance out along the radial represented time. The board represented course, speed, and time from which a dead reckoning plot could be kept. My duty was to bring the board to the captain's quarters and plot the course on the chart under the captain's watchful eye.

I also would go to the galley and haul a bucket of coffee around the ship. The crew would dip their cups in the bucket. I would then return to the galley for a basket of dunkers (fried dough) which the sailors dunked in their coffee and ate.

I was a busy young lad and the sailors all watched out for me. I was never allowed in the rigging but the crew all treated me like their own son. At night there was always an additional crew member on ice watch. Memories of the Titanic were still a reminder. I would often sit with the ice watch crew member and listen to their tales. Many of the crew made trinkets that they could sell in port for extra money. Many of these items were made of retired lines from the

Above - 75 Sailor’s whisks

Below- Zipper pulls made from 4 knots

rigging now relegated to being “rope” as it was no longer serviceable. One of the trinkets was a whisk. As a Christmas stocking stuffer this year I made 75 sailor’s whisks from 1/2” Manila rope (see top of p14).

Along with 75 sets of four different knots made up as zipper pulls. Two different colored 5x4 Turks head with a core made from crystal mined in the same mine from which King Arthur’s magician Merlin mined his magic orb (at least that was the story told), footrope knot, and Chinese snake knot. Here are 10 sets of them (see bottom of p14).

It was from this round trip across the North Atlantic at age 10 that I learned my nautical terminology. There was a locker where retired lines that were no longer serviceable were kept. Sailors were authorized to use these now ropes for anything without permission. The locker had a specific name which, 72 years later, now escapes me. (*any suggestions for the name? - Ed*)

At the age of six I had sailed with my father and grandfather aboard one of the old America Cup J boats. At age seven I had a Beetle class sailing dingy. Later in life, my wife and I had a series of sailboats with the last one being a 46’ cutter which we sailed equivalent to twice around the world over an 18 year voyage with two Maine Coon cats as crew. Our Ursa Major cutter below.

Oh, did I mention my parents were not aboard the barkentine and I knew nobody at the start of the voyage. I had a lot of “dads” by voyage end. Did a lot of growing up at a very young age that has served me well in life. Can’t believe any parent today would even think of doing something like this to a child. But I am so grateful for this experience and the growing up with so many “dads”.
- Jerome George

Twist Drill Method

by Frank Brown

I was introduced to this method of twisting up a length of rope or cord or twine or string by Darren Samphier a couple of decades ago. Since then I have twisted up many short lengths for a variety of tasks.

I assume the method is known to many members but there may be a few that are as unaware as I all those years ago, so here it is:

The equipment I use consists of a couple of cup hooks, which can be replaced by two short lengths of stiff wire or a pair of bent nails. Either a cordless drill, a hand powered drill or a powered drill with reverse action are preferred but in desperation a stick could serve to do the twisting. One hook is anchored, usually using a bench vice, and the other inserted into the drill. Fig 1 shows the drill, hooks and vice, plus a short length of string tied to the hooks. The fee hook is anchored in the vice and the string pulled taut.

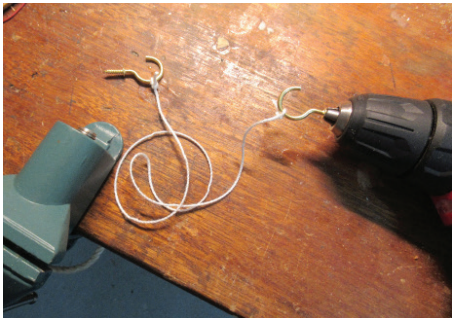


Fig. 1

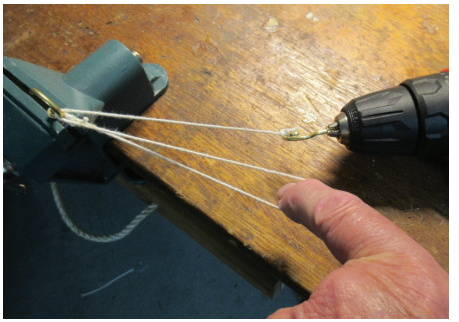


Fig. 2

In this case the string was laid up with a right hand twist, so the drill was switched to turn the same way. After fixing the hook in the vice and the string pulled straight, the drill trigger is depressed gently. As the string is twisted up it shortens and the tension increases. As this happens the drill is advanced keeping the string taught enough so that it does not start forming “kinkles”. If they do appear, reverse the twist but keep the string taut until they disappear. When the string has decreased in length about 10 to 20 percent, it is tripled as shown in Fig 2. The loop is passed onto the drill hook and the drill action reversed to create a 3 strand length of cord.

This operation can be easily carried out by a single person for short lengths of a metre or two. If a longer length is required a helper is welcome. I have made

lengths of several metres using a metal tray to hold the drill and keep the work piece taut as I dragged the tray and drill along the floor or over flat ground. Fig 3 shows the finished product I made to replace worn out laces.

Fig. 3

Fig. 4

Fig 4 shows line made from sewing thread where a single red thread was added for the final twist after tripling the twisted thread. This product could be of interest to some modellers perhaps. Fig 5 shows a short length twisted up to provide material for a becket.

A lovely lady member in the US introduced me to ply splitting. I have done very little of this particular craft but did work out how to make 4 strand cord which is a desirable material for such work.

Fig 6 shows the initial set up with one end of the string tied to the hook for the vice and the other end tied to a split ring. The ring could be replaced by something else including just a loop, but the ring makes manipulation easier. The hook is held by the vice and the ring slipped onto the hook in the drill. The

Fig. 5

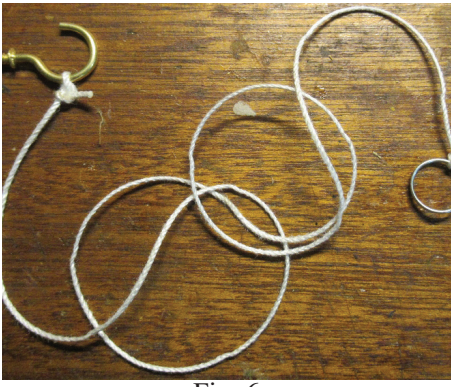


Fig. 6

string is then twisted up as is done for the 3 strand cord but when sufficiently tight it is doubled as shown in Fig 7 (below). The split ring makes transfer simple while keeping the string taut and kinkles more easily avoided.

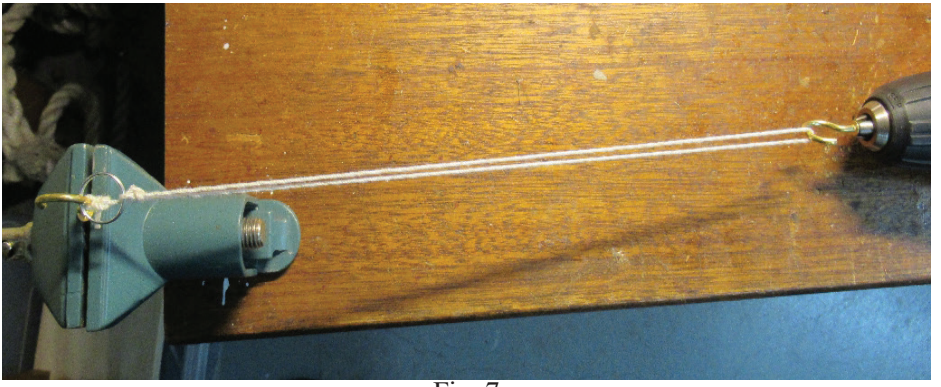


Fig. 7

The doubled string is then doubled again as in Fig 8 (below). The drill is then put into reverse and the cord twisted up. A second split ring can be used to make the second doubling easier. It is positioned by having it on the string at the beginning and then located at the centre when the sting is doubled where it can be slipped onto the drill hook.

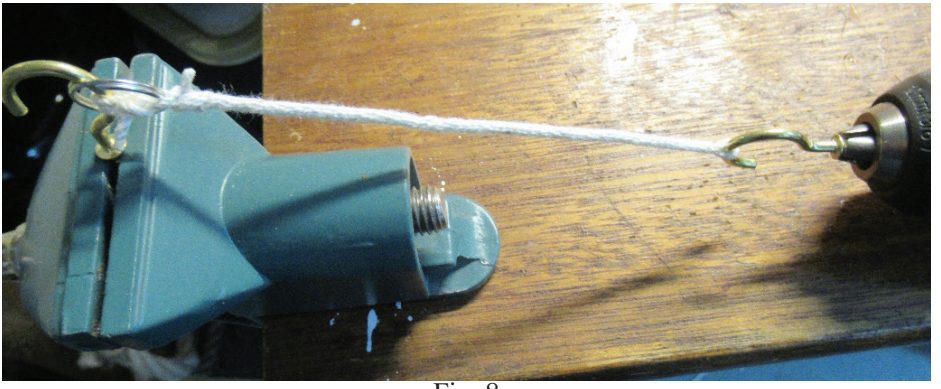


Fig. 8

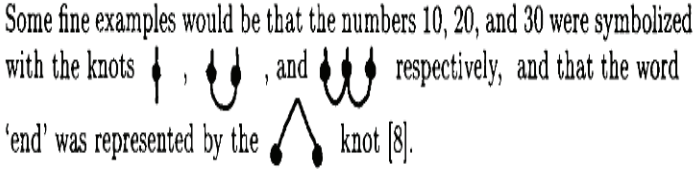
Creating a Knotted Writing System

By Carol Wang

"Let the people again knot cords and use them (in place of writing)"

使民復結繩而用之

This is a quote I've had on the front page of my website[1] since the beginning. It is from the Dao De Jing[2] as translated by Wing-Tsit Chan[3]. Several Chinese classics including the Yi Jing refer to knotted records or writing, which is inferred to be similar to Incan quipus[4]. Despite references to archaeological evidence[5], the only illustrations of what these knotted records might look like (that I could find) is this brief line art illustration by Lydia Chen in History and Science of Knots edited bv: Turner & van de Griend[6].


Some fine examples would be that the numbers 10, 20, and 30 were symbolized
with the knots , , and respectively, and that the word
'end' was represented by the knot [8].

There are some traces to indicate that more than numbers were recorded with knots what knots and what concepts or events those might be….???

And so it is that for many, many moons I have considered knotted writing systems. I have insufficient information to try to recreate the Chinese quipu-like record that Chen references Kao[7] describing, and no other reference that I could find has even rudimentary illustration as above. Taking historical fact for inspiration alone, could one create a knotted language? I'm certain it could be done, and if there are any conlangers out there who'd like to collaborate with me, I'm ready at any time.

1 https://chineseknotting.org/

2 https://chineseknotting.org/laotzu80.html

3 https://www.worldcat.org/title/The-way-of-Lao-Tzu-(Tao-te-ching)/oclc/36384564

4 https://en.wikipedia.org/wiki/Quipu

5 https://en.wikipedia.org/wiki/Chinese_knotting#Recordkeeping

6 https://doi.org/10.1142/2940

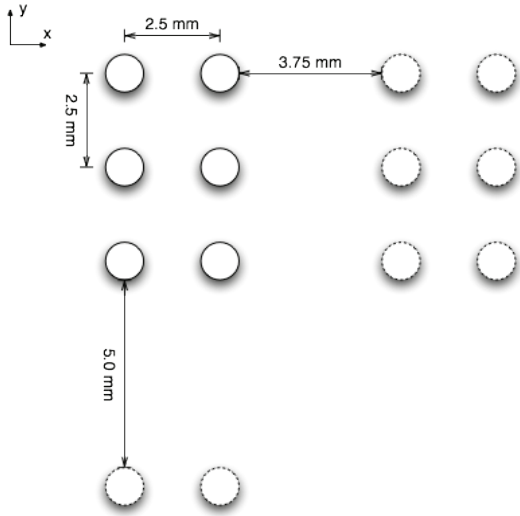
7 Can anyone find more information about Chung-kuo Tzu-li? The Origin and Development of Chinese Characters), 3rd ed., (Taipei: Kwang-wen, 1964) by Kao, Hung-chin, `Fu-shih`

This experiment, however, is not about an entirely new knotted written constructed language. It repurposes an existing writing/encoding system that can be knotted: Braille. Six or eight dots, carefully arranged, can represent (almost) any modern language. There are versions of braille for most languages you can think of, thus our knotted writing system will be polyglottal from the beginning!

The immediately obvious base from which to start, to me, was the friendship bracelet, a smooth canvas on which to place our dots. I experimented with normal[8] vs alpha[9] patterns and found that not only are alpha patterns more compact, with the no-name generic embroidery thread that I used for prototyping, the spacing was almost exact[10].

For the uninitiated, patterned friendship bracelets are generally composed of double half hitch knots (cow and clove hitches) in various configurations. “Normal” patterns have the threads interlinking with each other. “Alpha” patterns have a knotter (weft) thread that traverses back and forth over a sort of warp. It is only sort of a warp because the weft knotter provides a field of background colour and the warp threads are knotted over the weft thread for foreground details.

Braille dot height is specified to be 0.025 (0.6 mm) to 0.037 (0.9 mm)[11], so the height difference between the front and back of the knots is significant. For this reason, I reversed the knots (see next page) such that the vertical stitches (below last image) are on the back of the work and the double dashes (below bottom middle) are on the front. The height difference is not enough to simply use normal stitches for the dots…although that thought is untested. If I had a



Standards for Braille Dots

8 https://friendship-bracelets.net/tutorials/66

9 https://friendship-bracelets.net/tutorials/2

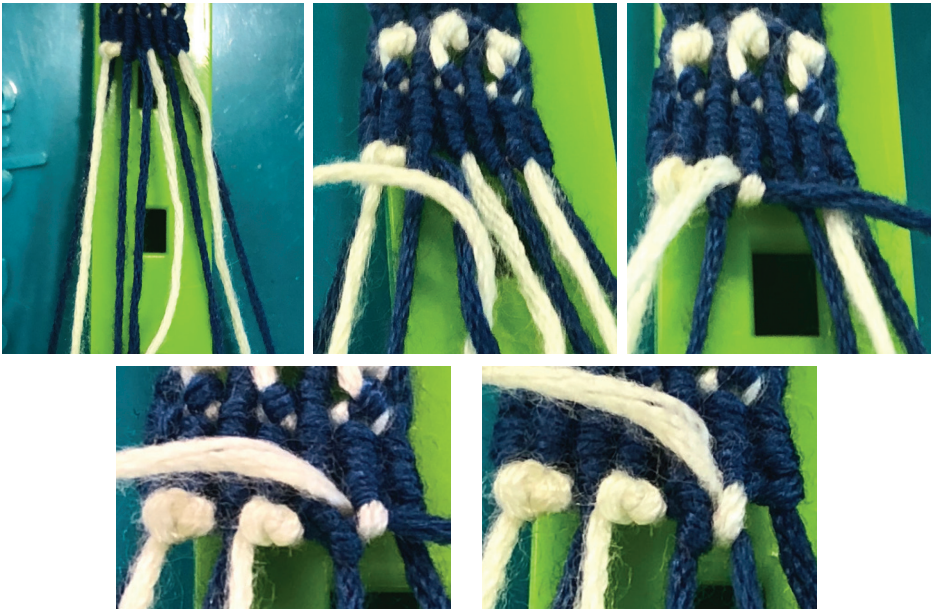
10 Illustration courtesy of Wikimedia user DBC334 (https://commons.wikimedia.org/wiki/User:Dbc334)

11 https://www.brailleauthority.org/braille-signage-guidelines

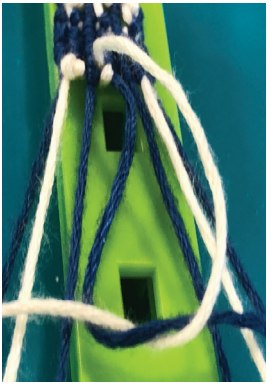
braille reader to test upon it would certainly be easier if reversed stitches have sufficient height differential to be braille legible. (Steps 1 -8 above -ed)

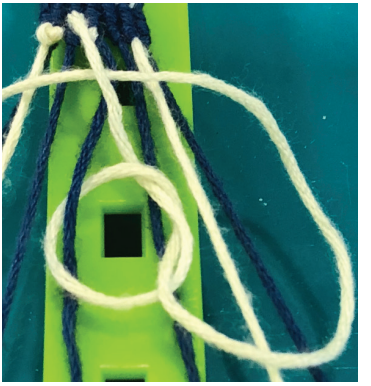
After much experimentation, this is the dot Bump Knot that I have invented. Bump dot rows are double half hitch (DHH) rows. More on this later. In this example we are knotting towards the right, so the bump knot will start with a leftward (back) half hitch (HH).

Note that if you hold the carrier strand (blue) downwards vs horizontally across, the size and shape of your hitch is very different.

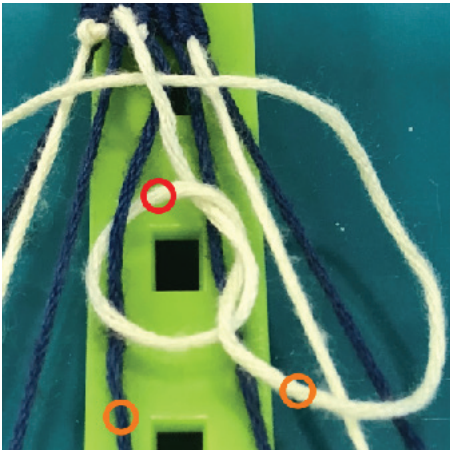
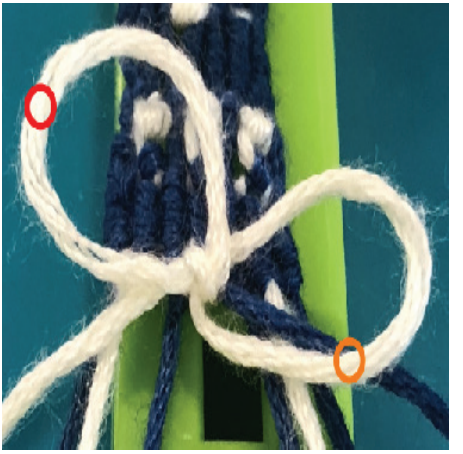


Then, very loosely, tie the second leftward half hitch…but,instead of tightening it and being done, convert that half hitch into an overhand knot (OH). Then thread the end of the bump strand under the stitch part of the modified double half hitch (HHOH?).





In other words, under the thread between hitch and knot, but above the carrier strand. I like to hold the carrier strand and the tail of the overhand together (orange dots) while pulling where you would have pulled the DHH to tighten if all you had tied was the DHH (red dot).

Cinch up the DHH part, remembering to keep the carrier strand horizontal, until you have a figure eight of sorts with the DHH stitch in the middle. Everything passes through this stitch and as you move the slack around that stitch will want to loosen, so remove all the slack you can out of both loops while still having enough there to give a last second tightening of the stitch with the top loop. Then tighten out the top loop with the bottom loop and finally close out the bottom loop.

Occasionally, despite all precautions, the knot will twist to the bottom of the fabric. You should be able to either push it back to the reading side, or pull it up.

As a computer nerd, I could think of no more appropriate “first words” than

hello world[1]

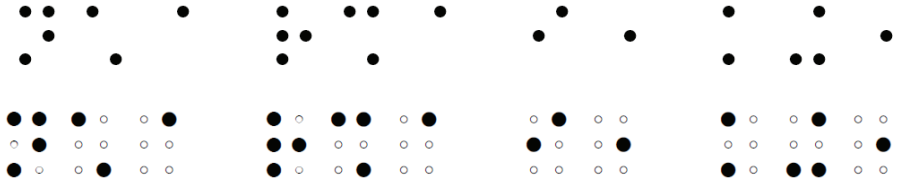
In Chinese, that’s nǐ hǎo shìjiè, or more accurately...

Taiwanese braille[2] converts each zhuyin element and tone (noted in red, above) to a braille character, so each Chinese character is two to three braille characters. Below you can see braille with and without placeholding indicators. I did this by tying an upward facing half hitch in foreground colour with a downward facing half hitch in background colour.

ㄋㄧˇ ㄏㄠˇ ㄕˋ ㄐㄧㄝˋ

你好 世界

These placeholding half hitches desperately want to capsize, so beware. Braille characters with dots only in one column are crazy difficult to parse for this newbie, so I chose to add the placeholders. They both do and don’t add to the visual legibility. What do you think?

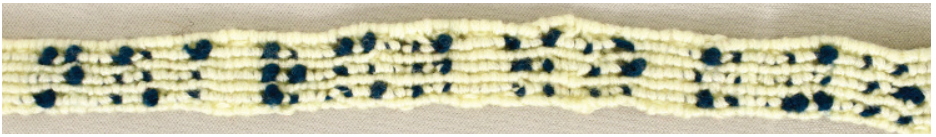


My prototypes are 1 line of text formed sideways. So there are 8 strands AABABABA where A is the first knotter (one of the joys of this colour

1 I appear to have tied “hello worl.” by mistake.

2 https://en.wikipedia.org/wiki/Taiwanese_Braille

arrangement is that any A strand can be swapped in when the knotter strand gets short, allowing a shorter knotter strand to be wrangled than in typical alpha patterns).

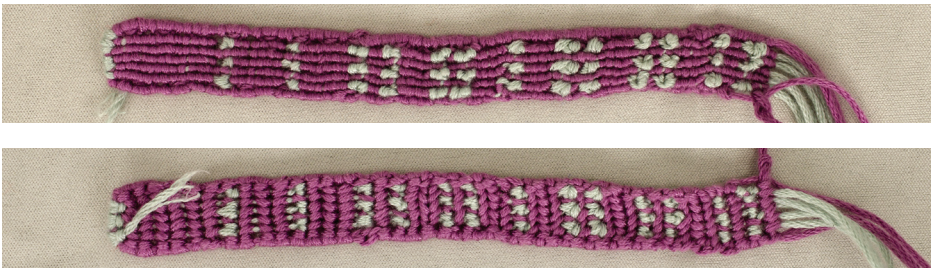


- As previously mentioned, bump dot rows are double half hitch rows
- One double half hitch stitch is the space between dot rows
- A row of single half hitches is the space between the dot columns
- The space between braille characters is 3 single half hitch rows which you can tie as 3 single half hitch rows or 1 double half hitch row and one single half hitch row, depending if you prefer to tie your bump dot row from the same direction each time or not. I tried to tie a triple half hitch row but didn't like how that looked.
- The space between words should be four rows of double half hitch, I believe, but three seemed wide enough and an odd number of spacer rows allowed me to tie my bump rows from the same direction, so …

I suspect, that in the end what I have produced is braille illegible due to unevenness and possibly spacing. Better friendship bracelet tyers than I could probably tie more orderly and regular lines of braille text. I hope, someday, to find some willing braille readers to experiment with me. The multilingual possibilities of braille are still of interest as the foundation of a knotted writing system and it could be that a more traditional alpha patterned bracelet with double half hitch foreground colour dots and single half hitch placeholders would be readable as braille to sighted readers, although it certainly feels inappropriate to create braille without dimensional bumps.

Initial prototyping

Bump dot prototyping and the reverse side



I hope that this idea which uses a well known craft as the base, cheap and widely available materials, and almost no required tools can be built upon by others, so I will ask again: If there are any conlangers out there who'd like to collaborate with me, I'm ready at any time.

- Carol Wang

See http://chineseknotting.org for more info or email wangc@chineseknotting.org

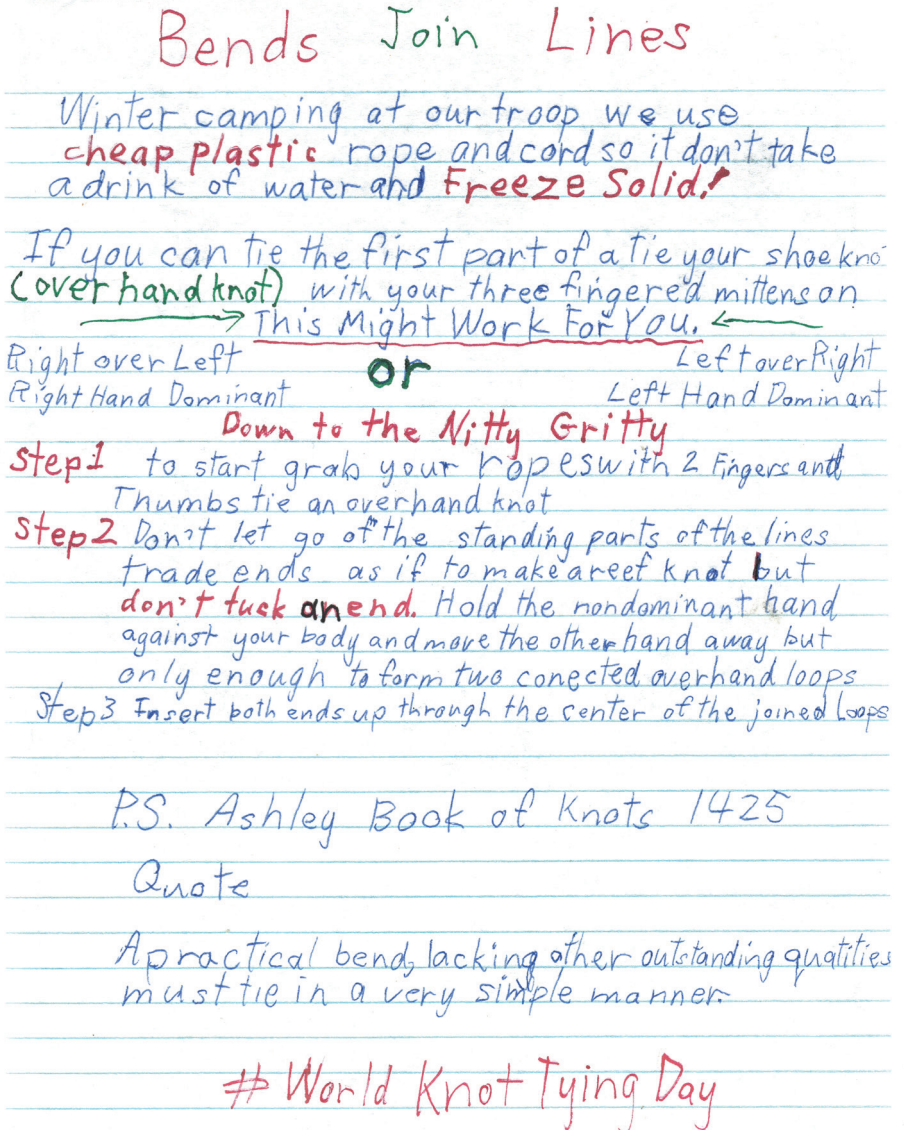
Holiday Greetings from all the membership countries

World Knot Tying Day

18 September 2023

by Peter Brown

Ed - We love to see your submissions for World Knot Tying Day. This year, I received a large parcel from an enthusiast in Canada. Space constraints prevent me from publishing all of Peter's work in this issue. Stay tuned!


Bends Join Lines
Winter camping at our troop we use cheap plastic rope and cord so it don't take a drink of water and Freeze Solid!
If you can tie the first part of a tie your shoe kno (over hand knot) with your three fingered mittens on
This Might Work For You.
Right over Left
Right Hand Dominant
or
Left over Right
Left Hand Dominant
Down to the Nitty Gritty
Step 1 to start grab your ropes with 2 Fingers and Thumbs tie an overhand knot
Step 2 Don't let go of the standing parts of the lines trade ends as if to make a reef knot but don't tuck an end. Hold the nondominant hand against your body and move the other hand away but only enough to form two conected overhand loops
Step 3 Insert both ends up through the center of the joined loops
P.S. Ashley Book of Knots 1425
Quote
A practical bend, lacking other outstanding qualities must tie in a very simple manner.
World Knot Tying Day

Reef knot, Thief's knot
Grany's knot too. take
care of the ends and
your now tying Bends!

#World knot
Tying Day

Peter Brown

I particularly enjoyed this last entry, constructed from cereal box cardboard, as it came with extra cord to try your hand at tying a left or right handed version of the knot.
I'd show you my results, but... 'No Peeking'. Thank you, Peter Brown, for your submission. - Ed

Ropemaker

by Brian Taylor

About a month ago (April 2023) I decided I would make a wooden geared rope making machine (along the lines of the New Era machine) to be demonstrated in various Aged Care Homes in Hervey Bay, Queensland, Australia.

The unit we used to use at The Historical Village was rather cumbersome. The new design would have a folding stand and have a lighter rope making device.

I used a clear acrylic disc of 150mm dia and 4mm thickness to enclose the gears and attach a handle so that the gears are visible.

A CNC machine cut out the gears perfectly, but the mounting board needed some modifications.

I will make the DXF files available to IGKT members at no cost. It would probably be a good idea to contact me via 'phone or email before starting the project.

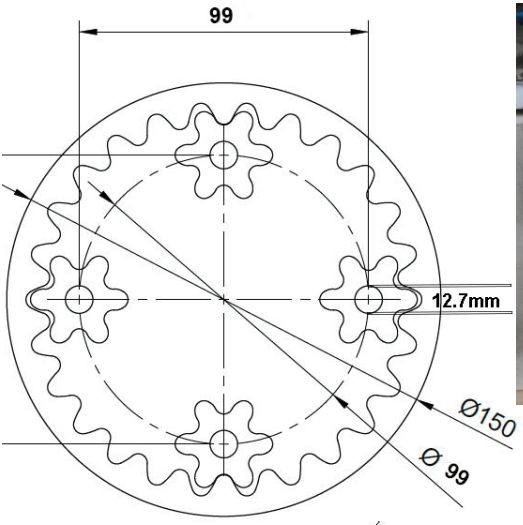
webmaster@herveybaymuseum.com.au +61 420994826

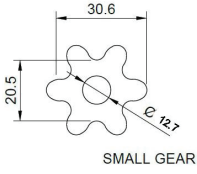
The mounting board final dimensions are:
Mounting Board - 150mm W x 210mm H, top radius to follow 150mm circle. Centre hole 6mm (but, your choice)

Spur Gear - Distance between centre for Spur gears is 99mm, Spur gear pivot holes 14mm

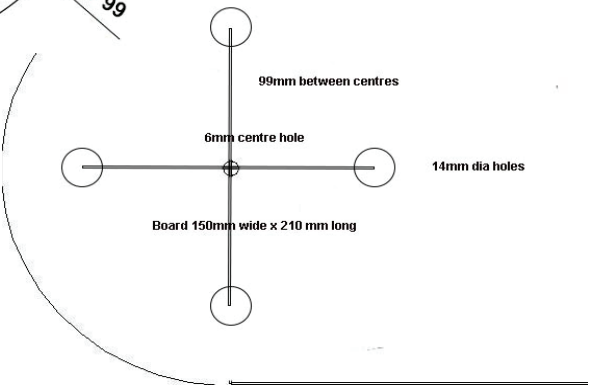
Small Gears (4) - Centre hole is 12.7mm

Components
Spur Gears with plastic washers
12.7 shafts glued into gears
Bunnings Cup Hooks
Centre bolt and wingnut
14mm holes
13 mm hardwood spacer
suit so thatwingnut bottoms on thread with minimal clearance (1mm)


99
12.7mm
Ø150
Ø 99


30.6
20.5
Ø 12.7

SMALL GEAR

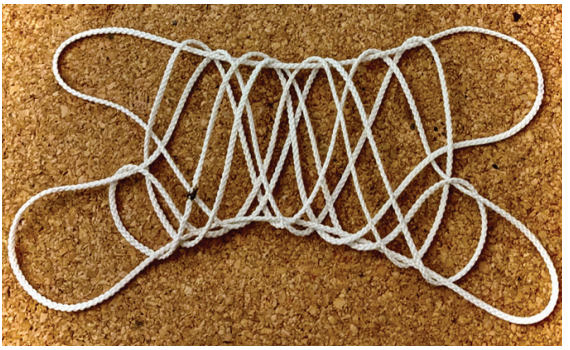

99mm between centres
6mm centre hole
14mm dia holes
Board 150mm wide x 210 mm long

Nettle, Heather and Straw Rope

by Philip Noble

Some 20 years ago a friend in France taught me how to make nettle string. I recently posted a YouTube video (YouTube/ Philip Noble/ making nettle string) so I won't bother describing too much more about it, except to note that it does produce a very strong and pliable twisted string which can be retwisted into strong rope for all purposes.

More recently I was speaking with my friend Revd Donald MacQuarrie, whose family hail from North Uist in the Outer Hebrides. I was making a string game of many diamonds from Nauru Island in the Pacific,



and he remarked that it reminded him of the rope patterns used in the old black-house thatching method. And so he began to tell me more about the black houses or crofts of the Hebridean Islands.

His parents had been brought up within a mile of each other and both lived in small buildings such as these. He now owns a similar one nearby and visits frequently. He told me of the old thatch that was taken off many years ago and replaced with a corrugated iron roof.

In days past, the thatching used to be redone every two years with fresh grass from the macher. (the raised beach area around the island). This often happened during a week of calm weather in November.

Dried Heather Bundle for Rope Making

He looked out a photograph of a sign that his children had made some 50 years ago. They had decided to make some pocket money by selling some of the old Heather rope to the tourists passing by.

“Genuine hundred-year-old Heather rope 10p, 20p, or 50p.”

I was intrigued to learn more about this Heather Rope.

Donald later wrote to me:

‘When we are up in Uist I’ll gather some heather strands and practice a bit of rope making, then we can get together and practice.’

A while back I did a study of thatching and gathered a lot of material - Rope may be something that in the modern world we take for granted, but a century ago on a working farm it wouldn’t have been easy to just go and buy some strong rope from a shop in town. Used for everything from tying bundles of firewood together to holding down thatched roofs, our ingenious rural ancestors made rope from the materials they found within the landscape around them. Much as with thatch and basketry, the materials used would depend on what was abundant and easy to source locally. For people living inland it could have been heather or reed, and for those living on the coast it might have been marram grass. Even horsehair was used in places like St Kilda where vegetation was scarce.

To give the rope strength, several strands of them needed to be twisted together. The more strands twisted, the tougher the rope would be, and that’s where the thrawcock comes in. Looping your material around the hook, with one hand on the end and one hand on the central piece of wood which sits loose, you

can twist two bits together to make 2-ply rope. Twisting this 2-ply rope on the thrawcrook again would give you 4-ply rope which would be even stronger and thicker.

One of the main uses for rope was to run across and secure thatched roofs. We know from a photo taken in the 1890s that almost every house on site was thatched before they were covered with corrugated iron, and the rope used to tie the thatch down in many parts of the highlands and islands of Scotland might have been made from rush, like the thatch itself, or the heather we know grew nearby.

Hundreds of metres of this would have been needed across the roof, which would definitely have kept two men and a thrawcock (twisting hook) busy for quite some while!

Donald directed me to a publication by historic Scotland called - Thatching techniques and the other Hebridean Black-houses.' This has a long section on the roof making techniques.

In the olden days the Heather roof was made by gathering young Heather and twisting in one direction only using a thrawcock.

It would be made indoors, of different thicknesses, sometimes plaited or even double twisted for strength and twisted inside the long two rooms of the cottage. One end held by the way by a child while their father or man of the house would do the twisting and call out, " Are you against the wall yet?"

If the answer was, " Yes", then the rope was long enough, then the roper could begin the technique of putting the rope over the thatch.

This began with a temporary back and forth movement, and when that was in place then the real work would begin much more accurately. It was carried out in the same way as a temporary roping and started at a cross stick. A rope was tied to this stick by the master thatcher and the length of rope was paid out to other men whose it was to fix the stones in position. The stone would inserted into the curve of the rope which was tensioned by the thatcher until the stone was approximately 100-150mm above the soldier course.(the low stone wall of the building).

The men on the weallhead (the side of the stone wall) flipped the stone over sideways to make a half hitch on the rope and the thatcher lowered a length of rope to the another man on the other side of the building who repeated the process.

Only the thatcher could see both sides so he alone was responsible for balancing the tension. He also determined the line and space of the rope over the ridge. After the roping was satisfactorily completed then the horizontal roping took place. Here the thatcher attached one end of a rope to a stone with a clove-hitch with a half-hitch the loose end was tucked behind the ropes from which the stones hung.

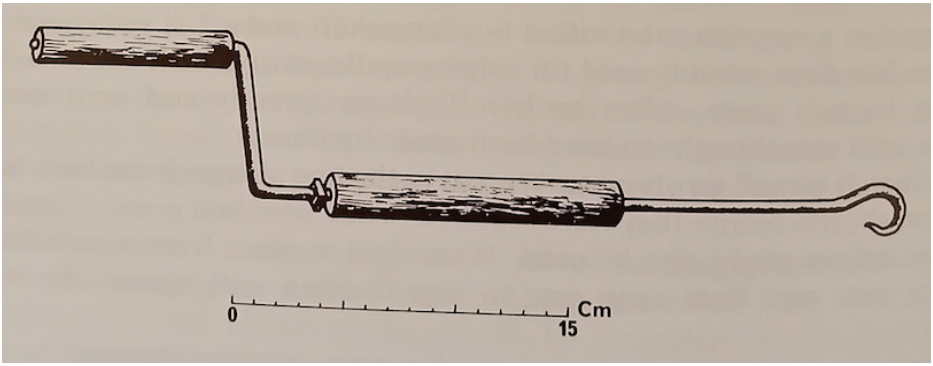
The Rope was angled up to a hanging stone about three stones to the left and it was taken in a turn around the vertical rope just above the stone. This was repeated all the way round the roof ensuring that the turn was formed in the same way each time with the loop towards the roof and the main rope running horizontal. Taking the three stones past the first stone to be fixed, the end was secured and tucked in under the hanging stone.

The horizontal roping continued around the roof at a distance of approximately 300 mm.

Aberdeenshire Straw Rope.

Talking about natural rope with my cousin who was brought up on a farm in rural Aberdeenshire in the 1950s, she recalls cutting the grasses down by the River Ythan to make thatch coverings for the hay bales.

Similar thrawcocks were used in rural Aberdeenshire in the early 20th century.



Straw Rope Twister

I have made a rough translation from the original Aberdeenshire Doric language of how the straw rope was made.

“ Roping a stack was a sophisticated exercise. First of all, the ropes were twisted in the barn during wet days, of straw by means of a metal twister shaped like a car starting handle with two wooden hand grips within which the body rotated.

An older form of twister was a rod with walking stick shaped head that acted as a hook.

The job of twisting required least skill, the operator simply walked back slowly twisting as he went. On the straw side a man fed the straw in an even stream through the space between the thumb and forefinger of one hand, meanwhile using the other fingers to tuck in loose ends and smooth rough patches. The completed rope was coiled into large round bails called Cloos and shorter lengths were called Edderin.

In the first method of thatching called Swappin, Cloos were laid alternately across the shoulders of the stack, so that the end result gave a diamond shaped appearance.

In the Second method known as the Edderin, ropes were first put on vertically, often three in number to give six uprights. From one side over the top and down to the other, and fixed firmly. Then the specially shaped Edderin was used to thread another rope round each of these verticals so that the final shapes had the appearance of a set of squares. This gives a much tighter job but also takes longer to do."

The stacks may be finished off with some fancy straw work. Several examples of thrawcocks are to be found in the History room of the old school Fyvie Aberdeenshire. The one shown below left is a fine example of three strand one.

Fancy Straw Work on Hay Stacks

Reference works:

Thatch and thatching techniques Historic Scotland Edinburgh 1996

The Hebridean Blackhouse Historic Scotland Edinburgh. 1996

(K)not Just For Accounting

by Richard Hopkins

We have read in KM a number of articles over the years, at least since KM 22, about the Quipu of the Andean Incas of South America.

Quipu is the Spanish spelling for the Quechua language word for knot

The Inca Empire traditionally began with Manco Capac about 1200 AD but of course by then he had conquered his subjects and needed a system to keep records. The Peruvian culture that he inherited dates back for several thousand years so the exact beginnings of quipu are unclear.

Quipu used a system of knots on strings to record data about things such as tax returns and population. It is believed that they may even have been used for poetry but because of the mass destruction of these records when the Spanish reached the area in the early 1500s and 'converted' them to more European systems much of the meaning has been lost.

Only about 850 to 880 quipu are known to survive and it has been suggested that as many as one eighth might be non-numerical giving rise to the idea of a method of recording ideas or recalling stories. If so, then they might not be phonetic and would convey the information by the knots which had a specific mnemonic meaning as do emoji, hieroglyphs or road signs. We may never know.

What is not often mentioned is that knotted cord was used for similar purposes in many other places but it never received the degree of attention given to Quipu and now with writing and improved education the use of knotted string as a record is dying out almost everywhere.

It should not be a surprise to learn that in Venezuela, very close to the Inca

Empire a system known as Wekui used a series of knots on a single string to keep track of the passage of days. Apparently this system was still in use in one community in Southern Venezuela as late as 1989.

Even today the Indians of Bolivia and Peru use a similar and possibly more sophisticated system known as Chimpu. To me, with no linguistic background, the similarity in the name suggests it may be a direct descendant. It would be interesting to obtain a professional opinion.

However, away from South America and further back in time the Greek historian Herodotus relates that the Persian king Darius entrusted the guarding of a strategic bridge to his allies.

He gave them a string with sixty knots tied in it and instructed them to untie one knot each day. If he had not returned by the time the last knot was untied then they could pack up and go home.

When the Middle East was under Roman control the tax collectors kept records on knotted string and the tax payer was given a receipt in the form of a string with knots tied in a certain way.

As is the case with so many things we now accept as our own, the Chinese seem to have been there first.

The very early emperor Shen Nong is believed to have helped developed a knotted cord system for accountancy. This was before the invention of writing around 3300 BC.

It is mentioned in the Ta Chuan, the Book of Change, a commentary on the I Ching which says ‘Government was carried on successfully by the use of knotted cords to preserve the memory of things’. When a unified system of writing had developed, again primarily to record taxes and broadcast orders and laws, the use of knotted cord dropped out of general use.

As far as I know no surviving examples of these cords have been discovered.

On some of the Japanese islands cords were used to record attendance at official assemblies and to record the taxes. These records, or Warazan, used a central

cord of rice straw and other plants with strands coming off to represent the amount of tax. The grouping, number of strands and their thickness indicated the value Picture 003

Even in recent times in some regions of the Okinawa island group workmen would use knotted cord to record their work days and money owed and some pawnbrokers recorded the loans with knotted string.

A related system is said to have been used in the Caroline Islands near Tahiti and also in Hawaii.

According to an account by someone from the London Missionary Society on an expedition in the 1820s the tax collectors kept exact records of a items collected by means of knotted cordage up to four or five hundred fathoms in length. Portions of the cordage were allocated to the various districts and distinguished from one another by knots, loops and added tufts of different shapes sizes and colours.

The idea of counting days using the same counting system as mentioned by Herodotus was also known in Nigerian for a man to let his wife know when he was due to return from a journey of known length.

The women also used a similar system to keep track of pregnancy by tying a knot – or untying one – at each full moon

Similar knotting systems were in use in many societies throughout the world for a variety of purposes, many of which helped the user to remember important date related information.

In 1339 a Persian historian wrote that Ibn Sina (we know him as Avicenna) then the finance minister of Persia, invented the ‘calculation knots’ thus freeing the accountants from totting up counters on boards.

The word for knot ‘aqd’ or ‘uqda’ had the secondary meaning which when developed stood for a decimal system. This is a condensed explanation but a fuller version can be seen in one of the references.

Even before the advent of Islam, Arabs had kept records on knotted cords. This would seem to be continuing the Middle Eastern tradition of the tax collectors already mentioned.

Mohammed's daughter Fatima counted the attributes of Allah on knotted cords and not on a rosary. Such cords were also used as receipts and contracts and the Arabic word 'aqd' means not only knot but also contract. Contracts are of course supposed to be binding.

Knotted prayer ropes were used by early monks to keep a record of how many times they said certain prayers and this became the basis of the string of beads called a rosary which acts as a guide to the sequence of prayers known as the Rosary. The beads keep track of the position in the sequence of prayers and thus free the mind for meditation. Most rosaries have five groups of ten beads but some have fifteen groups. Although now beaded rosaries are more common, knots were originally used and knotted rosaries are currently on sale on the internet. Picture 004

In the Eastern Orthodox Church the chotki or prayer rope usually has thirty three knots made from woven wool or silk and is used for the same purpose. Picture 005

Buddhists have a similar string of beads, the mala, usually with one hundred and eight beads and there is an extra distinctive bead used as a starting point for the recitation of mantras. Other beads are sometimes included at 27, 54 and 81 to mark the quarters so there might be as many as 112 beads in the mala.

Two side branches of ten beads may be added to record the number of complete circuits of the main run have been made. When one side arm has been filled one bead is counted on the second arm and everything starts again.

During the days of the British Raj, undercover agent in disguise used adapted mala to help them with the counting of paces between towns or landmarks when preparing maps or providing local intelligence to the authorities. The number of beads was such as to make it easier to convert paces into miles and the side arms helped to count the completed miles.

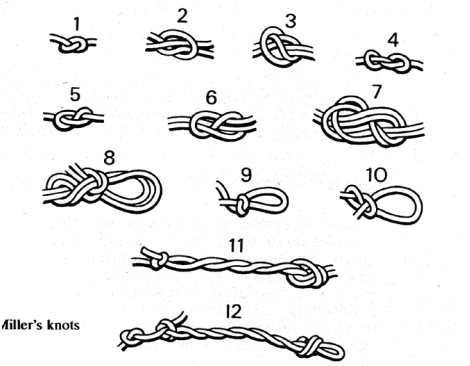
The presence or absence of a few beads was unlikely to be noticed should they be arrested or otherwise attract unwanted attention and the beads could be used for prayer in the normal fashion to avert suspicion.

A similar knotted string is still used by the military to count the tens of paces

when on a march. It may be threaded through a buttonhole and another knot is pulled through after the required number of paces has been reached. When the string comes to an end, at say a mile, then the process is repeated and a second set of knots, usually shorter, can be used to count the miles. Picture 006

While considering military matters the secretive Ninja in Japan used knot shapes and loops in cord to convey warnings or other messages to one another according to the Kamiyo Moji Hisho an historic Koga ninja manual.

All these practices are out- dated and seem old fashioned but my interest was renewed when I saw a reference to millers in Baden in Germany using different knots on the draw strings of the sacks to distinguish between various grains and flour types. They also denoted the quantity in each sack using combinations of the knots and added loops Picture 007



Miller's knots

I find one interesting thing about these knots is the name of the units of measure, the Sester. This is derived from the Latin Sextarius, a sixth of the Roman unit of volume the Congius.

Could the use of the knots date to Roman times or am I just wishfully dreaming.

This practise continued into the start of the twentieth century but information about it is scanty as it only appears to be mentioned without sources in a book on the history of mathematics. This book was used as the reference for further mentions in other books, much as a lot of knot lore has also been handed down without question.

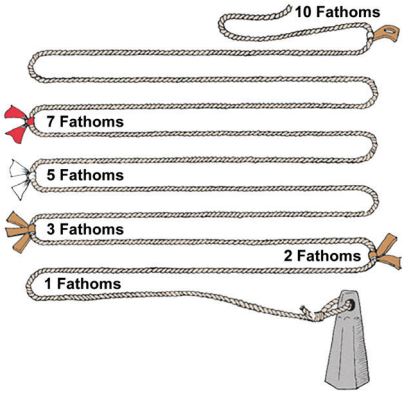
Coming even more up to date, KM13 published the suggestion of Desmond Mandeville who had worked out a system of different knots to represent numbers and also other knots for mathematical operators enabling a sum to be

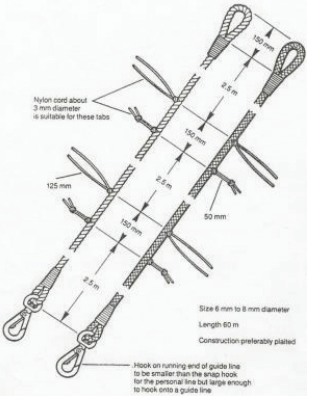
expressed as a series of knots along a cord. This was not a practical idea and does not appear to have been adopted anywhere yet.

He had also devised an alphabet of knots- KM4 - as a possible aid to vision impaired persons but again this does not seem to have caught on. It would have required a lot of cord to make a simple sentence and a lot of training although it could have supporters making tourist souvenirs or personalised sentimental bracelets or necklaces. When the affection faded the cord could be undone and used in a more practical manner.

He was following an idea of David McBeath in the early 1820s and probably others but these ideas also did not succeed. See KM 7 for a fuller account.

Also closer to home are the leadline used for depth sounding where the depth may be read of from markers of leather, duck, bunting and serge placed at regular intervals, and the fire fighter's breathing apparatus guide line which not only indicates how far he/she has come but also the direction to take for leaving the fire scene when visibility is restricted.. Pictures 008 & 009




Nylon cord about 3 mm diameter is suitable for these tabs
125 mm
150 mm
2.5 m
50 mm
Size 6 mm to 8 mm diameter
Length 60 m
Construction preferably plaited
Hook on running end of guide line to be smaller than the snap hook for the personal line but large enough to hook onto a guide line

These last applications of knots are not really connected with accounting or stock control as the alphabets and sums are not practical but they all indicate the versatility of conveying information by knots when applied to fields removed from the traditional view of tying things up.

I have gleaned the information for this article from a wide range of internet sources and from a wide range of, now considered old fashioned, books not all of which are in the references.

I also learned a new word -Semasiography -which means writing with signs. 'A non-phonetic based technique to communicate information without the necessary intercession of forms of speech'. Emojis are a modern example.

References:

Karl Menninger *Number Words and Number Symbols* Dover 1992 ISBN 0-486-27096-3

Edited by Graham Flegg *Numbers through the Ages* Macmillan 1989 ISBN 0-333-49131-9

Georges Ifrah *The Universal History of Numbers* Harvill Press 1998 ISBN 1-86046-324-X

Cyrus Lawrence Day *Quipus and Witches Knots* University of Kansas Press 1967 ISBN 9780700600199

Various Knotting Matters as mentioned in the text

Colin Grundy *Breathing Apparatus Guide Lines* IGKT 2017

Paper by Lyle E Jacobson University of Hawaii in *The Accounting Historians Journal* Fall 1983

Use of knotted string accounting records in old Hawaii and ancient China from the Internet

Alberto Saez-Rodrigu *Knot numbers used as labels for identifying subject matter of a quipu.*

Revista Latinoamericana de Etnomatematica Vol 6 No 1 febrero – julio 2013

Vladimir Esaulov *Data Storage with Knots and Beads* 30/07/2018 Kochi Arts and Science Space

From the internet.

Georges Ifrah Article *Knots and Numbers* I have lost the source from the internet.

NHK Television documentary series Ninja Truth

Illustrations from many sources but frequently the internet.

‘Miracle’ Baby Born with Knot

by Mike Taylor

Doctors have been left amazed after ‘miracle’ baby was born with a knot in her umbilical cord. Mother Melanie was taken to Gloucestershire Royal Hospital to give birth to her third child with her husband.

Libby Meecham was born at 4.08pm on Friday, September 15 2023. But doctors were left curious to see her born with her umbilical cord in a knot and were left marvelled by this rare medical incident, reports Gloucestershire Live.

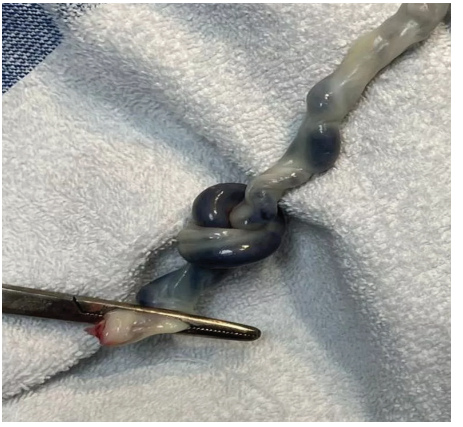
Knots in the umbilical cord can cause serious complications because they cut off a baby’s oxygen supply and can result in death. There is no way to check for knots in the umbilical cord while the baby is in the womb.

Melanie said: “I was half and half with it but they were talking about this cord. I asked my husband what they were talking about and he said the baby was fine but they have found a knot in her umbilical cord.”

Despite the rare medical incident, Baby Libby was seen to be normal and healthy and was later discharged from the hospital as planned. “They just called her a little miracle!”, said Melanie. “The doctors said her activity she has actually managed to thread her whole body through the cord to knot it through.”

Now at home, Melanie paid tribute to the hospital’s staff and her midwife: ”The staff were amazing.” (Images: Melanie Meecham)

ed - I think a complimentary IGKT membership might be appropriate. Congratulations to the Meecham family!



Obituaries

Dear Editors,

My name is Erc Dunne and I'm writing to ask for your advice. My brother Niall Dunne served as a CPO with the Irish Navy. When he retired after over 30 years of service he took to his hobby of knot tying. He was a member of the International Guild of Knot Tyers and would purchase a considerable amount of line and rope.

We lost Niall over a year ago, and I am the executor of his estate. Niall has a container workshop at his house which is full of rope and line. I would rather not just dump it and wondering if one of your members living in Ireland specifically in the Co. Cork area would be interested in taking it, obviously at a reduced rate. If you had direct email address I could attach some photos, which to be honest won't do justice to the volume. Can you let me know if you can help?

Regards, Erc

Ed - Please send interest to knottingmatters@igkt.net and we will forward your replies to Mr Dunne.

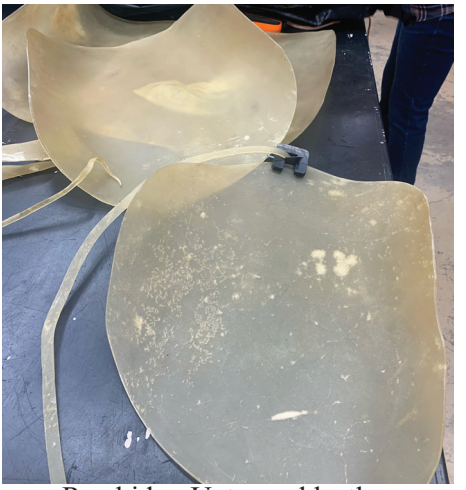
Rawhide Gathering
In Decatur, Texas
by Edward de Wit

Anyone who has watched cowboy movies or the modern series “Yellowstone” closely, will have seen that the horse tack is very different from most other countries. With the cowboys, however, you will see rawhide and lassoes, but what exactly is rawhide? Rawhide is an untanned leather.

Rawhide occupies a distinct place in human history. It has been used for many things necessary for human survival and development. Today, we mostly associate it with horse equipment and the American and Argentine cowboy.

When the Spaniards originally came to North America, they brought with them the horse disciplines that evolved from the time the Moors invaded Spain (a period that spans about four hundred years).

Rawhide makes itself. The hide is removed from the animal and hung to dry. While drying, the fat is removed from the inside and the hair is removed on the outside. This allows you to cut the pattern and/or strands for the application you want to use.



Rawhide - Untanned leather

This is where the California (Vaquero) Cowboy comes around the corner.

In the early days of American settlement, ranches were in remote areas. It was necessary to have many skills and crafts at your disposal to keep everything running. The Vaqueros developed the skills to make what they needed: the jaquima, the bridle and romal reins, quirts, and de la reata and other supplies. Each of these tools was made by braiding cowhide and has been passed down for centuries.

A La Reata or Rawhide Lasso in Detail

This tradition has proven to be an effective and humane method for the horse to perform its duties on the ranch all these years. There is no better way for a Vaquero.

All well and good, but then what is this article doing in Knotting Matters? After all, Western style has its own typical knots and braids and the tools are also different.

Last year, I was approached via Geert Willaert by Jan Boogaerts, a Belgium cowboy at heart and connoisseur of rawhide, horses and even a former champion in the international Reining and cow horse sport (A discipline in which riders must perform various maneuvers and control a bovine during a trial at gallop).

Mike Hickey teaching a Honda

He asked me if I would like to make a la Reata or a lasso on the rawhide rope machine? This succeeded (by trial and error), but I myself was not really satisfied with the way it was made and explained to him that it could be made in another way and even stronger!

Jan was open to this and asked if I could and would possibly demonstrate this at the rawhide gathering in Texas! October 2023 was the day, suddenly I was in Texas with a suitcase full of rope (lasso's) and was picked up from the Dallas Fort Worth airport by the two sweetest people I have ever met Mike and Trudy Hickey.

Mike Hickey gets a new La Reata

Mike Hickey is a person who loves nothing more than analyzing knots, he has written several books under the name "Tom Hall" his most famous being "Introduction to Turkish heads" and a you Tube channel Tom Hall Braiding and Knots.

In Decatur, I arrive at the National Roper's Supply World, a ranch, store,

A Honda - Rawhide Swivel

team ropers events and home to a training and event and learning center and trailer dealership, a paradise for the horseman or woman. I am assigned my Bunkhouse and meet in the arena where team roping is currently being done.

During the show, Mike explains the rules to me and the cowboys on horseback throw their lasso's at the calf, which then lies on the ground and suddenly the horn goes off in the arena, the time is noted and the show starts again with two other cowboys.

What exactly is the rawhide gathering and what do they stand for?

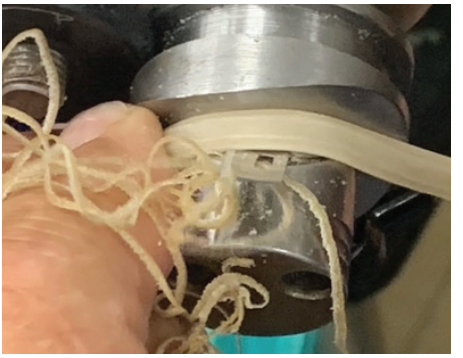
The rawhide gathering originated 10 years ago with a small number of people of which Clint Haverty is the organizer. These people prepare hides, knots, braids, needlework and their own horse tack and these are actually used.

Since the western side is also becoming a forgotten craft, these very people want to preserve it and pass it on to other people (where have we heard this before!) to learn the craft.

Every year these people from all over the world gather at the NRS World to learn, discuss and exhibit. Meanwhile, many knowledgeable people come there and even people who are with the Traditional Cowboy Arts Association Exhibition & Sale and make museum pieces.

Some big names are Pablo Lozano, Domingo Hernandez, Nate Wald and others

and all are driven natural talents. There are people there who have written books like Mike Hickey and Enrique Capone, people who make their own machines for cutting rawhide, orders, etc.



Beveling the Strands

Randy Roberts is a professional hide salesman, he prepares, cuts the hides to size and also makes cutting tools.

Work from Lilly Klaussen & Nancy

Ron Titus teaches an introductory class on the history of rawhide and what it is all used for.

I'm sure I've forgotten names of people but all are craftsmen at their best!

Day 1 of the rawhide gathering, Clint Haverty gives a speech and opens the event and I get to be the first to give my presentation on rope making and making rawhide rope. There I tell about the rope machine and accessories and my new way of making a lareata, Lasso or Lariat and what is involved.

Honda in progress

Following that, we give a demonstration on how a rope is made and a little later in the day we made a rawhide rope my way which quite a few people were skeptical about.

Randy Roberts cut and prepared and tempered the strands (see above). It

turned out to be a beautiful rope and I gifted it to Mike Hickey (see p 47) with his promise to test it in the field. 14 days after the gathering, I have the video proof. Tested, passed, and proven.

Over the next few days Mike taught me how to make a Honda (a swivel on the end of a lasso, see p48). It was my first rawhide project as far as braids and knots are concerned and I may say it turned out very well.

During the Rawhide Gathering a lot happens and you can learn a lot and have nice conversations. In short, for me, it was a fantastic experience that I certainly do not want to miss next time with these fantastic people.

For those looking for more info:
On Facebook: The Rawhiders Gathering; rawhide video libary

Edward de Wit, Jan Boogaerts, and Randy Roberts

YouTube: Tom Hall Braiding and Knots; Jan Boogaerts
Books: Mike Hickey (Tom Hall) and Enrique Capone

My thanks to all the people at the Rawhide Gathering who inspired me.

Edward de Wit,
Belgium
edward.dewit@telenet.be

News from the Branches

FRANCE

In Sac de Nœuds n° 52 (IGKT France newsletter) published in September 2022, we informed you of the Hart Bursary attribution to the Port and Inland waters Maritime Museum of Rouen.

This donation has been very much appreciated by the activity leaders intervening throughout the year and allowed to ensure the workshops for over 700 pupils per year.

Besides those workshops, this year took place a huge event named “L’Armada de Rouen” from June 8 to 18, 8th edition, gathering over fifty ships among which the greatest sailing ships of the world and over six million visitors!

The Maritime Museum was located in the heart of this huge event, and Museum management hosted, free of charge, IGKT France during the whole event. Twelve members ensured various demonstrations and animations all along the Armada from 10 am to 6 pm.

The Museum organized workshops for children from Monday to Friday, June 12 - 16. During those five days, 715 children were gathered (140+ per day)!

Each child went away with a “little man” that was knotted by him under the control of an activity leader. The workshop was done on six tables of six children with at least one activity leader per table.

The Museum also invited IGKT France to ensure knotting animations at the occasion of the “River fair” and the “Heritage Days” during which monkey fists, bracelets and different mats were knotted. However we had less visitors than during the Armada.

The Maritime Museum of Rouen and all it’s stakeholders want to thank very warmly the protagonists of the donation from the The George Hart Bursary.

Claude Davesne
President IGKT France

ed - see http://bit.ly/George-Hart-Bursary
Next one is June 2027

2024 IGKT AGM

National Museum of the Royal Navy, Hartlepool
Hartlepool North West UK Coast
May 9th - 11th

The next AGM will be held in this wonderful museum which has exhibits inside and out, a large indoor and outdoor exhibits, including the floating museum “Trincomalee”. For full details of the museum, see:
https://www.nmrn.org.uk/hartlepool

We will be in the museum Friday and Saturday, exhibiting as usual, ropemaking and other participating demonstrations.

On Thursday, we hope to visit the famous Tees Transporter Bridge.

The Tees Transporter Bridge at Middlesborough has played an important role in the area's history for over a century and continues to provide an important and unique crossing over the River Tees. In recent years the Transporter has emerged as a leading historic visitor attraction and is one of the UK's major sites for extreme sports including abseils, bungee jumps and zipslides. In 2011 to mark the Bridge's centenary the Heritage Lottery Fund (HLF) confirmed a £2.6m award for refurbishment and upgrade work to the Tees Transporter Bridge. The HLF supported Tees Transporter Bridge Visitor Experience Project included the installation of a glass viewing lift to provide improved access to the upper walkway, renovation of the gondola, replacement of the Bridge's motors and the development of state-of-the-art visitor facilities and resources.

At present this is still closed for refurbishment, but should be opening again this Autumn.

The AGM will be held early Friday evening as a hybrid meeting. We plan that this will be followed by a hot buffet supper, and the the Saturday evening "Knot Tyers supper" will be a hog roast. These meals will both be on site and are still at the planning stage but full information and booking details will be in the next KM.

There is a cafe on site for snacks during the day.

There are both Premier Inns and Travel Lodges at the Hartlepool Marina and many other place of accommodation in the area. There are numerous caravan and camp sites in the area.

Planning to visit ? Why not make a holiday of it at the same time ? There are so many wonderful places to visit en route.

The Yorkshire Dales, the North York Moors, Durham city, York city (or both) and their wonderful cathedrals Hartlepool itself is worth a visit.

There are the beautiful North Yorkshire and Northumberland coastal towns.

The amazing experience of Beamish ,the open air museum, can occupy a whole day. https://www.beamish.co.uk

There is a ropemaker, Caroline, who took over the business previously run by Outhwaites of Hawes. She runs her business in Askrigg near Hawes, but open for visit by appointment only. We have details for anyone interested.

Newcastle airport is the most convenient for Hartlepool, and for train travellers, the Mainline East Coast stops at Hartlepool.

Traditional Hog Roast

* Slow Toasted Free-Range Pig *
A whole Pig Roasted over flames.
Carved and Served by Our Professional Chefs.

Freshly Made Apple Sauce
The Distinctive Hog Roast Condiment
Made to our Own Exacting Recipe

Home Made Sage and Onion Stuffing
Hearty, Rich and Satisfying Made on Site and Served Hot

Professionally Prepared and Presented Crackling
Golden, Crisp, and Bubbling Perfection. Presented by Our Chef

A selection of Bread Rolls and Wraps, Including Wholemeal
(Happy to provide Gluten Free Rolls on Request)

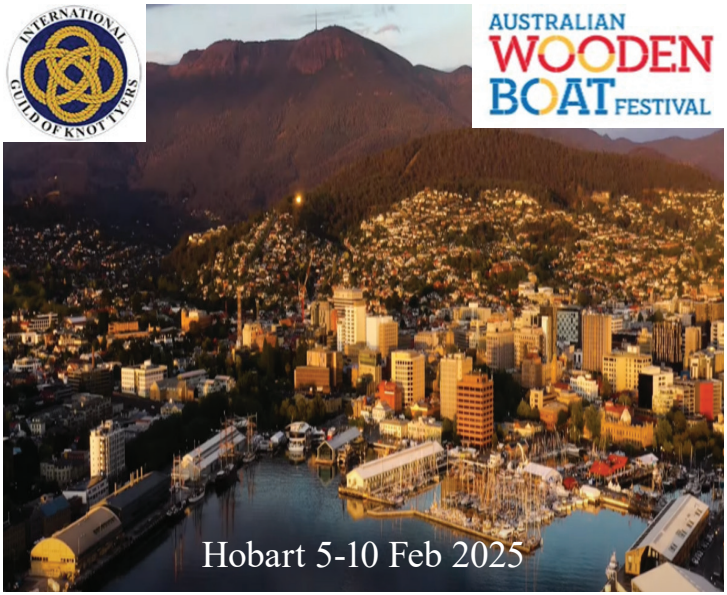
Home Made Vegetarian / Vegan Option

Choose From:
* Delightful Grilled Vegetable and Halloumi Skewers *
(without Halloumi for Vegans),
Served with Wraps and Tzatziki Dip and
Sweet and Punchy Sweet Chili Sauce

Or

* Vegan Pulled Jackfruit *
Slow Simmered Bursting with Flavour
Served in a Bun, Steeped in Hickory BBQ Sauce
and Dressed with a Crunchy 'Slaw

CORRECTION - In KM160, it was reported that the AGM will be at the National Historic Dockyard. As the previous article indicates, p52, the location has changed. We are very pleased and excited that the 2024 AGM will now be held at the National Museum of the Royal Navy, Hartlepool May 9-11.



IGKT Australian Meeting

5-6 Feb-- Closed IGKT Meeting & Dinner

7-10 Feb--Public Exhibitions, Demonstrations, Tutorials

Knotty Volunteers Needed!

Fender making tutorials
Children's knot tying activities
Knot Tying Demonstrations & Competitions

Please contact Barbara.Frankel66@gmail.com
if you are interested in helping with festival activities

https://australianwoodenboatfestival.com.au/
https://www.hobarttravelcentre.com.au

PHOTO CREDITS AUSTRALIAN WOODEN BOAT FESTIVAL

Branch Details

Australia

Contact: Robert Underhill
rvumoose@icloud.com
Tel: +61 488 777 785
34 Dawson Place, Donnybrook,
WA 6239 Australia

Belgium

Contact: Ronny Wouters
rcwouters@scarlet.be
Tel: +32(0)3 658 7937
Venue: Akkerlaan 24, 2900 Schoten,
België

Canada

Southern Ontario Knot Tyers
http://knotcanada.webs.com
Contact: John Staley
southern.ontario.knotyers@gmail.com
Tel: +1 905 389 2509
Venue: Hamilton, Ontario

France

www.igkt.fr
Contact: Jean-Pierre Durand
durand0547@orange.fr
Tel: +33(0)6 64 00 66 91

Germany

http://www.knotengilde.de/
Contact: Yuval Dvoran
info@knotengilde.de

Internationale Gilde der
Knotenmacher Deutsche Sektion e.V.
c/o Matthias Böving
Kappenstrasse 22
45473 Mülheim/Ruhr

Netherlands

Contact: André van der Salm
andrevdsalm@gmail.com
Tel: +31 (0) 625 067 174
Venue: Binnenvaart Museum,
Maasstraat 19, 3313 CR Dordrecht.

New Zealand

All enquries about this branch: contact the Guild's Web Administrator.

United Kingdom

Dorset - UK

Contact: Peter Goldstone
goldstonepg@aol.com
Tel: +44 (0)1725 516 258 or
Mobile: +44 (0)7702 733005
Venue: The Ship Inn, Custom House
Quay, Weymouth DT4 8BE

East Anglian - UK

Contact: Stuart Weston
pugwash1941@gmail.com
Tel: +44 (0)1449 674 327 or
+44 (0)7801 239 731
Venue: Windmill Room, Abbots Hall
Primary School, Danescourt Ave,
Stowmarket, Suffolk

Midlands - UK

Contact: Bruce Turley
bruce@btknots.co.uk
Tel: +44 (0)1214 534 124
Venue: The Old Swan Inn,
(Ma Pardoes), 89 Halesowen Road,
Netherton, Dudley, DY2 9PY

North West England - UK
Contact: Ian Rogers
iansrogers@aol.com
Tel: +44 (0)1606 590 729
Venue: Red Lion, 1 Wharton Rd, Winsford, Chester CW7 3AA and Tattenhall Marina, Newton Lane, Tattenhall, Chester CH3 9NE

Solent - UK
http://igkt-solent.co.uk
Contact: Chris Jenkins
igktchris@btinternet.com
Tel: +44 (0)2392 601 779
Venue: Fareham Sailing and Motor Boat Club, Lower Quay, Fareham, Hampshire PO16 0RA

Surrey - UK
www.surreyknots.org.uk
Contact: Tony Shellard
secretary@surreyknots.org.uk
Tel: +44(0)1483 502 156
Venue: Guildford District Scout Centre, Nightingale Road, Guildford, GU1 1ER

West Country Knotters - UK

Contact: Richard Hopkins
richardhopkins907@gmail.com
Tel: +44 (0)1179 867 146
Venue: Woodhouse Park Fernhill, Almondsbury, BS32 4LX

Yorkshire - UK
Contact: David Pearson
wayzegoose_uk@yahoo.co.uk
Tel: +44 (0)113 257 2689
Venue: Pudsey Scout Headquarters, The Lanes, Pudsey, LS28 7AS

United States of America

Alaskan Branch - USA
Contact: Charles Rigden
charles@rigdencpa.com
Tel: +(1) 928 231 2775
Venue: Anchorage Senior Center, 1300 East 19th Avenue, AK 99501

North American Branch - Knot in the Middle - USA
www.igktnab.org
Contact: Rusty Hems
secretary@igktna.org
Tel: +(1) 317 627 4562

North American Branch - Mid-Atlantic Region - USA
All enquries about this branch: contact the Guild's Web Administrator.

Pacific Americas - USA
www.igktpab.org/
Contact: Peter Glick
PMGlick@gmail.com
Tel: +(1) 310 871 8611
Venue: Via Zoom, Contact Peter for details

All Branch details as on IGKT website on 26/11/2023

back cover: Rawhide work of Nyk Feller - Rawhide Gathering 2023

IGKT SALES (Supplies Secretary, 10 Chine Avenue, Bittern, Southampton SO19 7JF UK)	**GBP**
A New System of Knotting by Harry Asher - A reprint. Asher's genius is shown really clearly	£7.00
A Sailor and his Knots - A unique reprint of Ashley's 1925 work	£10.00
A Practical Approach to Circular Knotworks by A and C Åström - Circular knots **2nd Edition**	£10.00
Knotty Potty by 'Jenny Wren', alias IGKT co-founder Geoffrey Budworth	£4.00
Plaited Moebius Bands by Geoffrey Budworth - A collection of knots with the properties of Moebius strips	£2.00
A Booklet of Lanyards by Willeke van der Ham - an easy to follow introduction to making lanyards	£4.00
Breast Plate Designs by Brian Field - Designs to make and wear	£3.00
Concerning Crosses and More by Brian Field - Flat Knots tied 'in hand'	£3.00
Knotted Novelties by Eric Franklin - Reprint of *Nylon Novelties*	£3.00
Turksheads the Traditional Way by Eric Franklin - A really useful introduction Reprinted 2022	£3.00
Knotcraft by Stuart Grainger - A much-loved book about decorative knotting	£4.00
Knotted Fabrics by Stuart Grainger - Making mats, covers, baskets, etc. A reprint of this popular work	£10.00
Turkshead Alternatives by Stuart Grainger - Decorative chains and grommets	£3.00
Breathing Apparatus Guidelines by Colin Grundy - A fascinating story	£4.00
A Comprehensive Text of Turk's Head Knots by James Harvey - A reprint of this great book	£16.00
The DIY Book of Fenders by Colin Jones - Does exactly what it says	£12.95
Advanced Knotting by Maurice McPartlan - An excellent DVD for complex 3D Turks Heads	£12.00
Decorative Woven Flat Knots (incl pdf) by Skip Pennock - Lots of terrific shapes	£12.50
Design and Make Rope Mats and Rosettes by Nils Kristian Rossing - Circular mats **2nd Edition**	£13.00
Charlie's Knots by Charlie Smith - Tying Turks Heads directly in the hand New edition	£3.00
A Fresh Approach to Knotting and Ropework by Charles Warner - A wonderful work with over 500 diagrams	£15.00
The Wee Lighthouse Knot by Pieter van de Griend	£4.00
Tramblings by Desmond Mandeville - Mandeville's work Reviewed and Edited by Geoffrey Budworth	£12.00
The Rope Menagerie and A Ropy Chess Set by Frank Brown - His first set of cord effigies (BandW)	£8.00
The String Zoo and The Cord Zodiac by Frank Brown - Many more ideas for small cord figures	£14.00
Monographs 1-14 by Des Pawson - Various prices, see full list on website	
Exploring Turks Heads Articles about Turks Heads from the first 150 issues of *Knotting Matters*	£14.00
IGKT Enamel Badge - *clasp or pin fitting*	£6.00
IGKT Cloth Badge	£5.00
IGKT Car Window Sticker	£2.00
IGKT Photographer's Scale Card - *indispensable for indicating the scale of a pictured subject*	£1.00

Please e-mail your order to supplies@igkt.net stating your full postal address to which the items should be sent. We will then send you a request for payment (including postage and packing) so that you can pay securely by PayPal, online, using any card. If you do not use e-mail, please contact the IGKT Supplies Secretary, address above